

Pathways to Emotional Well-Being and Adjustment in Adolescence: The Role of Parent Attachment and Competence

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Abstract

This study examined competence as a mediator between parent attachment (mother and father) and psychological well-being and adjustment of adolescents. A total of 282 high school students from the city of Ankara completed the self-report measures of parent attachment, competence, positive and negative affect, and adjustment. Using structural equation modeling, a model was examined in which competence mediated the link between parental attachment and well-being and adjustment of adolescents. Results from structural equation modeling analyses indicated that competence fully mediated the relationship between attachment to mother and well-being and partially mediated the relationship between attachment to mother and adjustment. On the contrary, attachment to father associated directly with adjustment. These findings suggested that parent attachment foster adolescent well-being and adjustment by promoting high level of competence.

Key Words: Attachment, Adolescents, Well-being, Competence, Adjustment

Introduction

Attachment security is a cornerstone of social development because it provides the child with autonomy, self-confidence, other emotional and social tool needed to develop relationship with in the social world. In other words, Bowlby (1988) suggested that when the children develop a secure attachment to their primary caregiver, they develop an internal working model and sense of self that serves as guide for social interaction and contribute to positive experiences in their relationship with other. The basic premise of attachment theory is that the quality of attachment relationship stems from interaction between infant and their caregiver, particularly the degree to which they can rely on

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attachment figure as security and support. Caregivers (especially mother) who are sensitive and consistently responsive to their infant's needs are likely to foster secure attachment in their children. As a result of early attachment experience with caregivers, individuals construct internal working model of themselves, other and relationship that they use to guide their expectations in subsequent close relationship (Bowlby, 1969). Therefore, individuals' experience with the availability of attachment figures in their lives shape their feelings of security and trust in others.

In line with Bowlby conceptualized attachment as a life span construct, with children maintaining attachments bonds to their parents across childhood and into adolescence (Buist, Dekovic, Meeus, & van Aken, 2004). Thus, attachment to parent in adolescence has been explicitly considered in many studies that provide empirical evidence for the link between parental attachment and psychological well-being and adjustment in adolescence. For instance, secure individuals are more optimistic in the face of threats, are more comfortable seeking support when under stress, use more constructive coping strategies, and have more trusting beliefs about the goodwill of others (Shaver & Hazan, 1993). In addition, Armsden and Greenberg (1987) revealed that parental attachment contributed positively to self-esteem and life satisfaction and negatively to measure of anxiety, depression and feelings of alienation, and also appeared to enhance adolescents' well-being by increasing their self-esteem and diminishing feelings of depression. The resulting literature on attachment styles attests to the importance of secure attachment for well-being and adjustment.

Taking a relational perspective in the connection between parents and adolescents, it is crucial to determine how the attachment feelings obtained from parental attachment are associated with emotional well-being and adjustment in middle-aged adolescence. The main goal of the present study was to conduct the association between parental attachment and emotional wellbeing and adjustment. In addition to this, the relationship between parental attachment and adolescents' perceived competence was conducted on determining adolescents' emotional well-being and adjustment in middle adolescence.

Attachment, Emotional Well-Being and Adjustment

Over the past few decades, the growing amounts of research promoting strengths in adolescents shows that the positive psychology focus has increased attention paid to the importance of the relationship between attachment to parents and mental health (Wilkinson, 2004) and psychological well-being of adolescents (Cotterell, 1992; Raja, McGee & Stenton, 1992).

Although many different conceptualizations of psychological well-being (PWB) have been introduced into the research, one of the most frequently cited conceptualization conducted by Diener (1984). According to Diener, the term 'happiness' is commonly operationalized as subjective well-being (SWB) and is generally composed of three domains of experience: positive affect, negative affect, and life satisfaction. Diener also defined SWB as the unity of cognitive and affective evaluations of life. The former is called as life satisfaction, while the latter as subjective emotional well-being (SEWB) which is operationalized as the presence of positive affect (PA) and the absence of negative affect (NA), (Diener, Lucas, & Oishi, 2002).

A growing number of researchers have become interested in the framework that parent-adolescent attachment relationship is related to well-being and adjustment of adolescents. An impressive body of literature indicates that secure attachment relationships are associated with consistent and long-term benefits for psychological well being and adjustment. For instance, a longitudinal study showed that children with histories of secure attachment patterns were more competent, emotionally healthy, self-confident, and socially skilled than anxiously attached children (Elicker, Englund,& Sroufe, 1992). In the same vein, another distinguished longitudinal investigation was carried out to determine the role of parental attachment and its effects on adjustment (Doyle & Markiewicz, 2005). In the study, perceived parental attachment was evaluated among adolescents from 13 years of age to 15 years of age and various aspects of adjustment such as depressive symptoms, self-esteem...etc. The results of the study revealed that attachment to parent was associated to adjustment in regard to levels of internalizing problems, self-esteem,

and reported school achievement two later. Thus, researchers concluded that attachment security influences on adolescents' adjustment.

Consequently, quality of the attachment between the child and the parent seems to contribute to development of social relationship, to emotional regulation, to the way the child copes with subsequent development tasks (Grossman & Grossman, 1991; Kobak, 1999; Srouf, Egeland, & Krautzer, 1990).

Attachment and Competence

Adolescents' own competence is also most important for young people's well-being and adjustment. In general, it is obvious that competence can be defined in numerous ways. Feeling competent correspond to view them capable and having a sense of mastery over one's capacity to act in the environment. Throughout life, people engage their world in an attempt it and to feel the sense of effectance when they do (Deci & Ryan, 2000). Self-determination theory (SDT) proposes that humans have three basic psychological needs, each of them being essential because it contributes independently to healthy psychological growth (Ryan & Deci, 2000). One of these needs is competence and others are autonomy and relatedness. The need for competence is considered with some behaviors such as curiosity, mastery, exploration, and a overall attempt at dealing with the environment in a competent way (Harter, 1981; Harter & Connel, 1984). Ryan and Deci (2000) obviously mention that SDT applies, in principle, to individuals of all age groups: "the basic needs for competence, autonomy, and relatedness must be satisfied across the life span for an individual to experience an ongoing sense of integrity and well-being" (p. 75). In the context of the present investigation, competence is assumed as key psychological well-being, this study is rather attention on competence as a basic psychological need.

Many of studies consistently mentioned that attachment relationship between parent and child influence children's competence across various domains of functioning. Adolescent who are secure attached to their parents should be better able to develop adequate social skills, which are necessary for the initiation and maintenance of warm, satisfying and reciprocal relationship within the social context (peer group, classmate, close

relationship...etc). The secure attachment relationship between the child and their caregivers has a significant impact on the development of socio-emotional competence (Main, Kaplan, & Cassidy, 1985; Weinfield, Srouf, Egeland, & Carlson, 1999). In the same vein, children who have a secure attachment to their caregivers as an attachment figures, can explore their environment with confidence and security, therefore facilitating their competence and autonomy (Grossman, Grossman, & Zimmerman, 1999; Main, 1983). Moreover, La Guardia, Ryan, Couchman, and Deci (2000) found that college students' security of attachment was significantly associated with autonomy, competence, and relatedness.

Competence, Well-Being and Adjustment

A vast number of studies have demonstrated the importance of ongoing feelings of competence for optimal functioning and well-being. For instance, Bandura's (1977) work on self-efficacy has found that believing that one can bring about desired outcomes is an important determinant of psychological health. In a related vein, Carver and Scheier (1990) have shown that believing that one is effectively making progress toward one's goals is psychologically beneficial.

A number of studies have also pointed out a significant relation between need satisfaction and well-being outcomes in adolescent samples. Varennaou, Koestner, Abala, (2005), examined the relation of need satisfaction to concurrent and future levels of well-being in a sample of 331 third and seventh graders. Satisfaction of the need for competence was associated with concurrent positive and negative affect and depressive symptoms, as well as future levels of negative affect and depressive symptoms. The results of the study suggested that satisfaction of the need for competence and also need for autonomy and relatedness were associated with well-being during middle childhood and early adolescence, as at other developmental stages. Sheldon, Ryan, and Reis (1996) performed a study on daily well-being which revealed that autonomy and competence contributed independently to well-being. In fact, higher levels of trait competence best predicted low levels of negative affect, whereas higher levels of trait autonomy best predicted high levels of positive affect and vitality. In addition, Crittenden (1992) found that secure children

were more emotionally competent and were capable of maintaining organized behavior in the context of emotional arousal. Similarly, in adolescence, empirical evidence showed that secure individuals were more socially competent and less aggressive (Rice, 1990; Simons, Paternite, & Shore, 2001).

As a results, given that the relationship between attachment to parent, competence, well-being and adjustment level of adolescents, it is possible claimed that adolescents with secure attachment seeks proximity and support from the attachment figure, which foster of their competence and facilitate them to improve their feelings of well-being and adjustment in the exploration of the world. Thus competence may serve as an crucial mediator between parental attachment and well-being and adjustment.

The purpose of the study was to examine whether parent attachment (mother and father) exert solely direct effected on adolescents' adjustment and psychological well-being (i.e., positive affect and negative affect) or whether these effects were mediated through the adolescents' competence (Figure 1). The direct paths suggested that secure attachment relationships with mother and father promote adjustment and feelings of well-being. However, the indirect paths proposed that mother and father attachment had indirect influences on adjustment and well-being through competence. Secure attachments with mother and father likely foster high levels competence, which in turn have been linked with high levels of well-being and adjustment. If the mediation effect of competence between attachment to parents and adolescents' well-being and adjustment were to be confirmed the implications for school counselor are far-reaching.

Method

Participant and Procedure

315 high school students from Ankara, Mamak Anatolian High School, were asked to participate in the study during the 2008 academic year. The scales were completed anonymously no compensation was given participation and All the scales were answered collectively in the classroom at the student's school during hours. The students were asked to fill in their thoughts, and the instruction was read aloud, stating the importance of

answering each items. The average administration was approximately 15 min. 33 participants were excluded from the study because of their incomplete answers. The results were analyzed for the remaining 282 participants (149 female, 133 male) aged between 14 and 18 years ($M= 16.05$, $SD=1.04$).

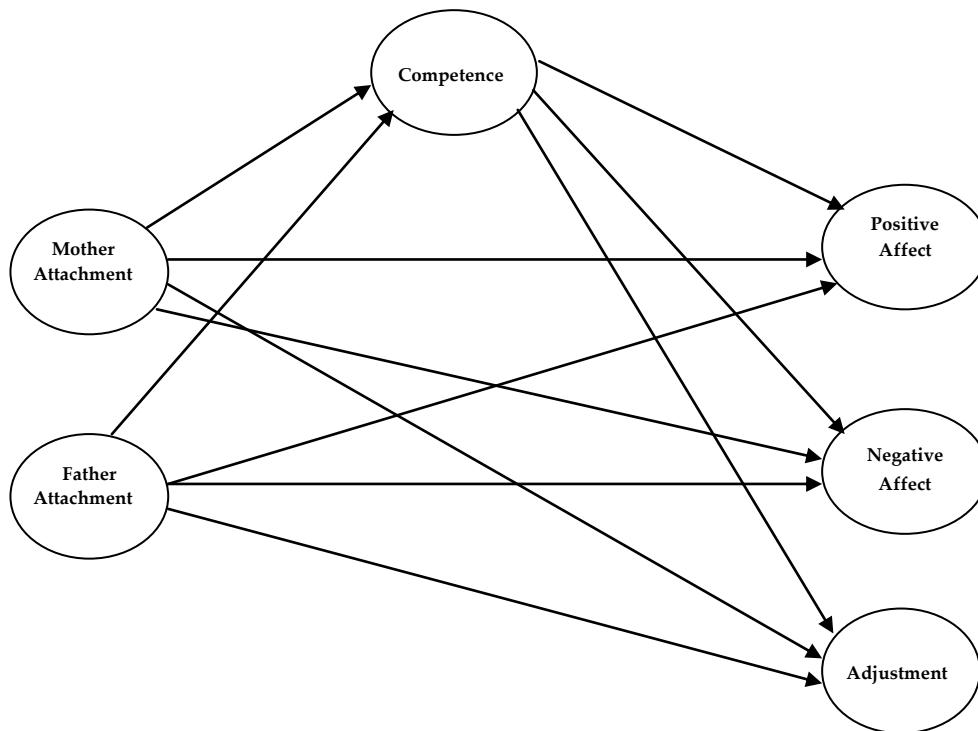


Figure 1. Theoretical model depicting links among parents attachment, competence, well-being and adjustment construct.

Data Collection and Analysis

Data gathering took place through four instruments: Inventory of Parent and Peer Attachment (IPPA), Positive and Negative Affect Scales (PANAS), Reynolds Adolescent Adjustment Screening Inventory (RAASI), The Basic Psychological Need Scale (BPNS).

To test the proposed model, structural equation modeling with latent variables was performed, using Lisrel 8.54 (Jöreskog and Sörbom, 1993). For this analysis, goodness-of-fit statistics were tested with χ^2 (a non-significant value that corresponds to an acceptable fit). Because χ^2 are known to increase with sample size and degree of freedom, the use of four indices is commonly suggested; (a) Standardized Root Mean Square Residual (S-RMR) $< .08$, (b) Root Mean Square Residual of Approximation (RMSEA) $< .06$, (c) Goodness-of-Fit

Index (GFI) > .90, (d) Adjusted Goodness-of-Fit Index (AGFI) > .85 and e) Comparative Fit Index (CFI) > .90 (Hu & Bentler, 1999).

Measures

Inventory of parent and peer attachment (IPPA; Armsden & Greenberg, 1987).

IPPA derives from the theoretical assumption of attachment theory, and assesses the positive and negative dimension of adolescents' relationship with their parents and close friends. The items in the original version of the IPPA, in sample of collage students aged between 16 and 20, demonstrated good internal consistency and through principal components analysis, were clustered into three factors, namely "Communication", "Trust", and "Alienation" (Armsden & Greenberg, 1987). The Cronbach alpha (α) internal consistency of IPPA for this study was .93.

Positive and negative affect scales (PANAS; Watson, Clark, & Tellegen, 1988).

PANAS, developed by Watson, Clark, and Tellegen (1988), is a ten-item brief measure of affective evaluation of life with two dimensions. Positive affect (PA) reflects the extent to which a person feels enthusiastic, active, and alert. In contrast, "Negative Affect (NA) is a general dimension of subjective distress and unpleasurable engagement that subsumes a variety of aversive mood states, including anger, contempt, disgust, guilt, fear, and nervousness, with low NA being a state of calmness and serenity. The adaptation of the scale to Turkish was made by Gençöz (2000). Consistent with the original study, the result of the factor analysis revealed two factors accounting for the 44% of the total variance.

Reynolds adolescent adjustment screening inventory (RAASI; Reynolds, 2001).

Reynolds Adolescent Screening Inventory (RAASI) is a 32 item self-report measure and was developed by Reynolds (2001). RAASI was used to evaluate adolescent overall psychological adjustment including antisocial behavior, anger control behavior, emotional distress, and positive self. The internal consistency coefficient alpha (α) for RAASI was found .91 in the present study.

The Basic Psychological Needs Scale (BPNS; Gagné, 2003). BPNS consists of three "need" subscales (i.e., Autonomy, Competence, and Relatedness), and autonomy need

subscale contains seven items, competence contains six items and relatedness contains eight items. The Basic Need Satisfaction in Life Scale (i.e., the general scale) was used in Gagné study and higher scores indicate higher levels of need satisfaction. In the present study, competence subscale was used to determine the level of perceived competence of adolescents. The internal consistency (α) for BPNS was found .91 in this study.

Findings

The parceling technique (Kishton & Widaman, 1994; MacCallum & Austin, 2000) was conducted to construct multiple indicators based on the single indicators in order to take advantage of the use of latent variables in the model. Means, standard deviation and zero-order correlation at the parceled variables were presented in Table 1.

The structural model was tested using the maximum-likelihood method in the LISREL 8.54 (Jöreskog & Sörbom, 1993). Before a structural model is tested, Anderson and Gerbing (1988) suggested conducting a confirmatory factor analysis to examine whether the measurement model provides an acceptable fit to the data. An initial test of the measurement model resulted in a relatively good fit to the data, scaled $\chi^2(120, N=282)=210,66, p=.001, CFI=.98, RMSEA=.052, SRMR=.027, GFI=.93$ and $AGFI=.90$.

The results of the structural model testing revealed a good fit of the model to the data, scaled $\chi^2(123, N=282)=253,79, p=.001, CFI=.97, RMSEA=.062, SRMR=.043, GFI=.91$ and $AGFI=.88$. Mother attachment and competence were significantly related to adjustment and well-being. However, direct paths from mother attachment to positive and negative affect were not significant suggesting that competence fully mediated the relationship between mother attachment and well-being, but partially mediated the relationship between mother attachment and adjustment. Father attachment was related to competence suggesting that paths from father attachment did not significantly contribute to the fit of the model

Therefore, the examination of the modification indices were considered to decide whether doing so worsened the fit of the model to the data with constraining these five paths (from mother attachment to PA, NA and from father attachment to PA, NA and adjustment) to

zero. These paths which were not significant were deleted from the model. The results of the modified model also revealed a good fit to the data, scaled $\chi^2(128, N=282)=266.54$, $p<.001$). The corrected scaled chi-square difference test (Satorra & Bentler, 2001) used to compare the initial structural model and this modified model indicated no significant difference in the fit for these two models, $\Delta\chi^2(5, N=282)= 2.23$, $p= .14$. As a result, the examination of the modification indices suggested that the five direct paths from mother attachment to PA and NA and from father attachment to competence, PA and NA did not significantly contribute to the fit of the model.

Apparently, the fit of the model to the data did not worsened with constraining these paths to zero. It can be concluded that the hypothesized model was supported and was improved by excluding some paths linking mother and father attachment to competence, PA and NA. Therefore, the hypothesized model was the good with an adequate fit to the data and the final model with standardized coefficients was presented in Fig. 2.

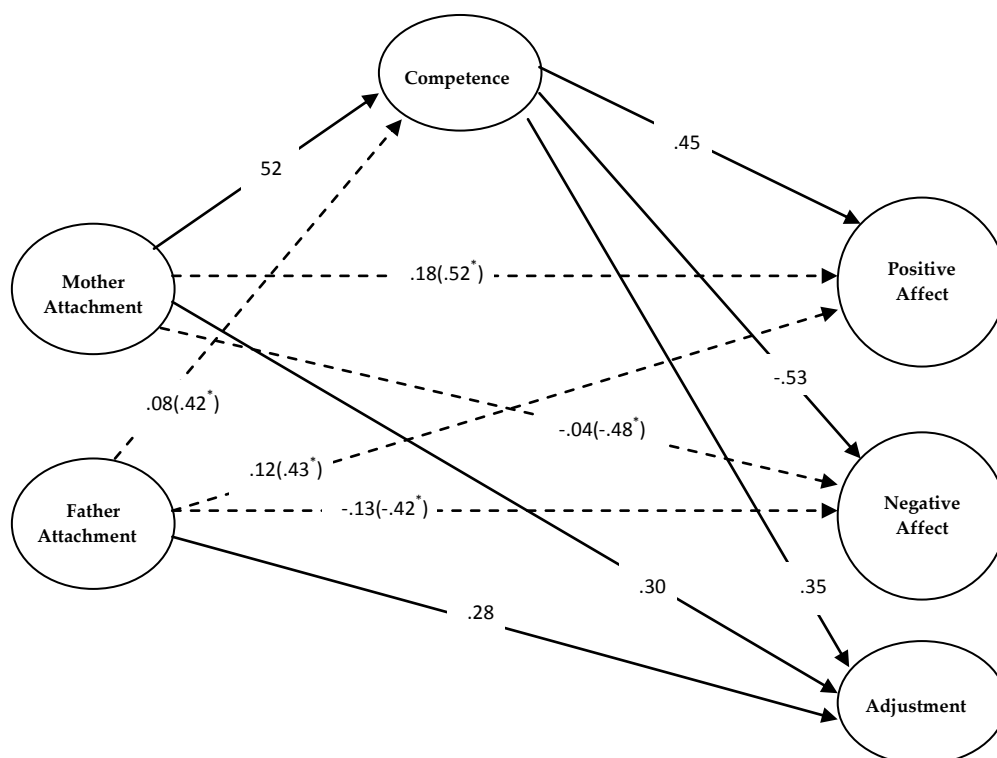


Figure 2. Structural model of relation among parent attachment, competence, well-being and adjustment. The numbers in parentheses refer to the coefficients for the measurement model. All coefficients are standardized values. $p^*<.05$

Table 1. Means standard deviation and correlations among observed variables

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1 Mot1	3.91	.74	-																	
2 Mot2	4.07	.70	.79	-																
3 Mot3	4.14	.70	.82	.82	-															
4 Fat1	3.56	.87	.58	.56	.52	-														
5 Fat2	3.89	.85	.55	.52	.50	.85	-													
6 Fat3	3.90	.83	.53	.54	.49	.87	.85	-												
7 Adj1	4.04	.72	.59	.53	.55	.54	.57	.56	-											
8 Adj2	3.59	.81	.58	.48	.57	.48	.50	.47	.74	-										
9 Adj3	3.93	.70	.60	.51	.59	.49	.53	.50	.78	.80	-									
10 Adj4	3.69	.74	.58	.51	.53	.51	.54	.54	.80	.77	.81	-								
11 Com1	5.07	1.06	.44	.39	.43	.34	.31	.31	-.43	-.44	-.49	-.42	-							
12 Com2	5.06	.95	.37	.40	.39	.30	.31	.25	-.38	-.38	-.45	-.36	.65	-						
13 Pa1	5.50	.85	.34	.37	.32	.27	.29	.32	-.31	-.27	-.33	-.37	.34	.36	-					
14 Pa2	4.87	.89	.28	.28	.30	.19	.21	.21	-.27	-.32	-.31	-.34	.38	.36	.49	-				
15 Pa3	5.01	.75	.34	.33	.32	.29	.32	.29	-.23	-.25	-.24	-.23	.32	.35	.51	.45	-			
16 Na1	3.08	1.03	-.38	-.30	-.39	-.31	-.33	-.30	.51	.53	.53	.46	-.54	-.42	-.25	-.34	-.23	-		
17 Na2	3.51	1.16	-.42	-.34	-.44	-.36	-.38	-.37	.57	.63	.55	.57	-.49	-.35	-.23	-.25	-.20	.66	-	
18 Na3	2.92	.94	-.31	-.23	-.35	-.27	-.31	-.28	.43	.50	.49	.42	-.45	-.27	-.22	-.28	-.20	.69	.60	-

Note. N = 227. Higher scores on attachment to mother (Mot. 1, 2, and 3) and attachment father (Fat. 1, 2, and 3) indicate higher levels of attachment to parents. Higher scores on Adjustment (Adj. 1, 2, 3, and 4) indicate higher negative indicators in adjustment level of adolescents. Higher scores on Competence (Com. 1 and 2) indicate higher levels of competence need. Higher scores on Positive affect (Pa. 1, 2, and 3) indicate higher levels of positive affective evaluation of life. Higher scores on Negative affect (Na. 1, 2, and 3) indicate higher levels of negative affective evaluation of life Attachment to mother 1, 2, 3 and attachment to father 1, 2, 3 three parcels from the mother and father subscale of Inventory of Parent and Peer Attachment (IPPA). Adjustment 1, 2, 3, 4 four parcels from the Reynolds Adolescent Adjustment Screening Inventory (RAASI). Competence 1 and 2 two parcels from the Basic Psychological Needs Scale (BPNS). Positive affect 1, 2, 3 and Negative affect 1, 2, 3 three parcel from the Positive and Negative Affect Scale (PANAS). Absolute values of correlation greater than or equal to .15 were significant at $p < .05$, to .17 at $p < .01$, and to .21 at $p < .001$.

Discussion and Conclusions

The significant findings in the present study were that competence partially mediated the relationships between mother attachment and adjustment and fully mediated the relationships between mother attachment and psychological well-being. Results also indicated that both father attachment and were not related to adolescents' competence and psychological well-being, on the other hand, father attachment was, for the most part, directly related to adjustment.

This findings of the study revealed that mothers generally continue to play an important role in providing a basic sense of security and availability throughout the age of adolescence. Mothers were perceived as sources of security in samples of middle adolescents for their psychological well-being and adjustment through competence. Fathers were chosen much less often than mothers but when chosen they served the secure base component of attachment across adolescence and early adulthood. This is consistent with other research (e.g., Trinke and Bartholomew, 1997) that fathers were ranked lower than mothers and also the attachment relationship between adolescents and mother were generally higher quality than the relationship between adolescents and father (Paterson, Field, Pryor, 1994). Perhaps adolescents consider mothers to be the parental representatives, and assume that fathers will play a supportive role to her.

The results of the current study can be used in the prevention and intervention programs for facilitating adolescents' development at the school settings. The aim of this kind of training or education program is to strengthen the bond between adolescents and their parents, so that they can establish better interaction to overcome difficulties in the adjustment and emotional disturbance. Especially school counselors may develop workshops or group training sessions in which mother and fathers participate in to learn various skills to help adolescent improve the "competence", including the communication skills, the quality of relationships in the peer groups, and the social interaction management. In this consideration, such a kind of training and workshop for parents may attend to the importance of the relationship between parents and their children and the different influence of paternal and maternal attachment in adolescent development.

Perhaps increasing competence needs may be one of several possible interventions, which could reduce the feelings of shame, depression, and loneliness experienced by high school students with high levels of attachment anxiety (Wei, et al., 2005.) Undoubtedly, school counselor is a unique role model to offer students needed support and guidance in the school counseling activities. Counselor may provide corrective relational experiences for students who have experienced unresponsive or harshly responsive relationship with attachment figure (Bolwby, 1988). Actually, such a corrective relationship may establish an effective therapeutic relationship between school counselor and students to help the students with the improvement of social competencies which in turn may enhance emotional and social functioning. School counselors can support the students by informing about the importance of such activities and helping them to use them. This is particular crucial in light of the frame of Social-Cognitive Learning Thoery that social self-efficacy may be improved through performance accomplishment, vicarious experiences, verbal persuasion, and reduction of emotional arousal (Bandura, 1977; 1982). Indeed, school counselors need to make specific efforts to engage the students for practicing assertiveness skills, working with others on group activities of mutual relationship, observing socially competent model...etc.

A number of important limitations must be acknowledged. First, in the present study, the data was obtained from adolescents' self-report values. At this point, it is argued that it is not clear whether those who state that they are competent really are competent in the eyes of their teachers, peers, and parents. For this reason, it is necessary to know how perceived competence is associated with actual competence and further studies should consider the perception of both teachers and peers regarding competencies of the adolescents. Because adolescents who perceive themselves as less competent but they are competent according to teachers and peers, or adolescents who perceive themselves more competent but they are not perceived by friends as competent. Second, the present study has a limitation in terms of the generalizability the sample and findings of the study. The sample was exclusively middle class and from an intact family. A vast number of recent studies have investigated attachment, competence (emotionally and socially), and psychological well-

being in diverse groups such as early adolescent and late adolescents and clinical samples. Further studies may examine whether the findings of the present study hold across different samples.

In spite of these limitations, the findings of the study showed that perceived competence fully mediates the relationship between attachment to mother and positive and negative affect, and also partially mediates the relationship between attachment to mother and adjustment. On the contrary, perceived competence had no association with attachment to father and negative and positive affect, while attachment to father associated with adjustment directly. In order to further discuss, further theoretical elaboration and empirical evidence are required.

References

- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103, 411–423.
- Armsden, G.C., & Greenberg, M.T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence*, 16, 427–454.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavior change. *Psychological Review*, 84, 191-215.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37, 22-147.
- Bowlby, J. (1969). *Attachment*. Vol. 1 of Attachment and Loss. New York: Basic Books.
- Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. New York: Basic Book.

- Buist, K. L., Dekovic, M., Meeus, V. H., ve van Aken, M. A. G. (2004). Attachment in adolescence: A social relations model analysis. *Journal of Adolescent Research, 19*(6), 826-850.
- Carver, C. S., & Scheier, M. F. (1990). Principles of self-regulation: Action and emotion. In E. T. Higgins & R. M. Sorrentino (Eds.), *Handbook of motivation and cognition: Foundations of social behavior* (Vol. 2, pp.3–52). New York: Guilford Press.
- Crittenden, P.M. (1992). Treatment of anxious attachment in infancy and early childhood. *Development and Psychopathology, 4*, 575–602.
- Cotterell, J. L. (1992). The relation of attachments and supports to adolescent well-being and school adjustment. *Journal of Adolescent Research, 7*, 28.42.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227-268.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin, 95*, 542-575.
- Diener, E., Lucas, R. E., & Oishi, S. (2002). Subjective well-being: The science of happiness and life satisfaction. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 63-73). New York: Oxford University Press.
- Doyle, A.B., & Markiewicz, D. (2005) Parenting, marital conflict and adjustment from early- to mid-adolescence: Mediated by adolescent attachment style? *Journal of Youth and Adolescence, 34*, 97-110.
- Elicker, J., Englund, M., & Sroufe, L. A. (1992). Predicting peer competence and peer relationships in childhood formerly parent-child relationships. In R.D. Parke & G.W. Ladd (Eds.), *Family-peer relationships: Modes of linkage* (pp. 77-106). Hillsdale, NJ: Lawrence Erlbaum.
- Gagné, M. (2003). The role of autonomy support and autonomy orientation in prosaically behavior engagement. *Motivation and Emotion, 27*, 199-223.

- Gençöz, T. (2000). Pozitif ve negatif duygu ölçeği: Geçerlik ve güvenirlik çalışması, *Türk Psikoloji Dergisi*, 15(46), 19-26.
- Gorssman, K. E., & Grossman, K (1991). Attchmant quality as an organizer of emotional and behavioral responses in a longitudinal perspective. In C. M. Parkes, J. Stevenson-Hinde, & P. Marris (Eds.), *Attachment across the life-cycle*. Tavistock, Uk: Routledge.
- Gorssman, K. E., Grossman, K. & Zimmerman, P. (1999). A wider view of attachment and exploration: Stability and change during the years of immaturity. In J. Cassidy & P. Shaver (Eds.), *Handbook of attachment; Theory research and, clinical applications*. New York: Guilford.
- Harter, S. (1981). A model of mastery motivation in children: Individual differences and developmental change. In W. A. Collins (Ed.), *Minnesota symposium on child psychology*, Vol:14. Hillsdale, NJ: Erlbaum.
- Harter, S., & Connell, J. P. (1984). A model of children's achievement and related self-perception of competence, control, and motivational orientation. In J. Nicholls & M. Maehr (Eds.). *Advances in motivation and achievement* (Vol. 3). The development of achievement motivation. London: JAI Press.
- Hu, L. T. & Bentler, P.M. (1999). Cutoff criteria for fit indexes incovariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1-55.
- Jöreskog, K. G., & Sörbom, D. (1993). *LISREL 8. User's reference guide*. Chicago, IL: Scientific Software.
- Kishton, J. M., & Widaman, K. F. (1994). Unidimensional versus domain representative parceling of questionnaire items: An empirical example. *Educational and Psychological Measurement*, 54, 757-765.
- Kobak, R. (1999). The emotional dynamics of disruptions in attachment relationship: Implications for theory, research, and clinical intervention. In J. Cassidy & P. Shaver

(Eds.), *Handbook of attachment; Theory research and, clinical applications*. New York: Guilford.

La Guardia, J. G., Ryan, R. M., Couchman, C. E., ve Deci, E. L. (2000). Within-person variation in security of attachment: a self-determination theory perspective on attachment, need fulfillment, and well-being. *Journal of Personality and Social Behavior*, 79(3), 367-384.

MacCallum, R. C., & Austin, J. T. (2000). Applications of structural equation modeling in psychological research. *Annual Review of Psychology*, 51, 201-226.

Main, M. (1983). Exploration, play, and cognitive functioning related to infant-mother attachment. *Infant Behavior and Development*, 6, 167-174.

Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood, and adulthood: A move to the level of representation. In I. Bretherton & E. Waters (Eds.), *Growing points in attachment theory and research*. Monographs of the Society for Research in Child Development, 50, (1-2, serial no. 209), 66-106.

Paterson, J. E., Field, J. & Pryor, J. (1994). Adolescents' perception of their attachment relationship with their mother, father and friends. *Journal Youth and Adolescence*, 23(5), 579-600.

Raja, S. N., McGee, R. & Stanton, W. R. (1992). Perceived attachments to parents and peers and psychological well-being in adolescence. *Journal of Youth and Adolescence*, 21, 471-485.

Reynolds, W. M. (2001). *Reynolds Adolescents' Adjustment Screening Inventory (RAASI): Professional Manual*, Lutz, FL. Psychological Assessment Resources.

Rice, K. (1990). Attachment in adolescence: A narrative and meta-analytic review. *Journal of Youth and Adolescence*, 19, 511-538.

- Ryan, R.M., & Deci, E.L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68–78.
- Satorra, A., & Bentler, P. M. (2001). A scaled difference chi-square test statistic for moment structure analysis. *Psychometrika*, 66, 507-514.
- Shaver, P. R., & Hazan, C. (1993). Adult romantic attachment: Theory and evidence. In D. Perlman & W. Jones (Eds.). *Advances in personal relationships* (Vol. 4, pp. 29–70). London: Jessica Kingsley.
- Sheldon, K.M., Ryan, R., & Reis, H.T. (1996). What makes for a good day? Competence and autonomy in the day and in the person. *Personality and Social Psychology Bulletin*, 22, 1270-1279.
- Simons, K. J. M., Paternite, C., & Shore, C. (2001). Quality of parent/adolescent attachment and aggression in young adolescents. *Journal of Early Adolescence*, 21, 182–203.
- Sroufe, A., Egeland, B., & Kreutzer, T. (1990). The fate of early experience following development change: Longitudinal approaches to individual adaptation in childhood. *Child Development*, 61, 1363-1373.
- Trinke, S. J., & Bartholomew, K. (1997). Hierarchies of attachment relationships in young adulthood. *Journal of Social and Personal Relationships*, 14(5), 603-625.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063–1070.
- Weinfield, N., Sroufe, A., Egeland, B. & Carlson, E. (1999). The nature of individual differences in infancy caregiver attachment. In J. Cassidy & P. Shaver (Eds.), *Handbook of attachment; Theory research and, clinical applications*. New York: Guilford.

- Véronneau, M-H, Koestner, R. F, & Abela, J. R.Z. (2005). Intrinsic need satisfaction and well-being in children and adolescents: an application of the Self-determination theory. *Journal of Social and Clinical Psychology*, 24(2), 280-292.
- Wei, M., Shaffer, P., A., Young, S., K, & Zakalik R., A. (2005). Adult attachment, shame, depression, and loneliness: The mediation role of basic psychological needs satisfaction *Journal of Counseling Psychology* 52(4), 591-601.
- Wilkinson, R. B. (2004). The role of parental and peer attachment in the psychological health and self-esteem of adolescents. *Journal of Youth and Adolescence*, 33(6), 479-493.